

IN THE CLAIMS:

Please cancel claim 1 without prejudice, amend claims 2 and 4-14 and add new claim 15 as given below. Claim 3 has previously been canceled.

Claim 1 (canceled without prejudice).

2. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in] further comprising sliding promotion means [that] between [the] said coil cores and [the] said coils [is disposed a slide fit] of a magnetically neutral material [with good slide properties] for promoting sliding movements between said coils and associated coil cores.

Claim 3 (canceled without prejudice).

4. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that] wherein said inner housing has a hollow volume on each of [its] two frontal faces [has a hollow volume, which is] that receives a [encompassed by the] coil and into which [the] said coil cores project.

5. (currently amended) Vibration generator as claimed in claim 4,
[characterized in that] wherein each [the] hollow [volumes] volume, [each of which] is encompassed by [the] a coil [and] into which [the] an associated coil [cores project] core projects, is closed toward [the inside] the other volume by a bottom [, which] that is a portion of [the] said inner housing.

6. (currently amended) Vibration generator as claimed in claim [1] 5,
[characterized in that] wherein a spring is disposed at [the] said frontal faces between [the] said coil cores and [the] said bottoms of said inner housing [a spring is disposed].

7. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the] wherein said inner housing comprises a volume for [an insertable] inserting additional mass.
8. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the coils are fed from] wherein said energizing means comprises an electronic control device [, which] that outputs to [the] said coils electric oscillations or pulses, which have opposite [polarity] polarities.
9. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the] wherein at least one of said outer and/or inner [housing] housings is provided with an acceleration pickup.
10. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the] wherein said coil cores are comprised of a magnetically soft metal alloy.
11. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the] wherein said coil cores are each provided with a venting channel [, which] that extends from [the core head] a volume of said outer housing to an associated hollow volume [into the outer] of said inner housing.
12. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that on the] wherein said outer housing coupling elements are provided for [the] coupling said generator to the object to be investigated.
13. (currently amended) Vibration generator as claimed in claim [1] 15,
[characterized in that the slide fits in a brass sleeve] wherein a brass sleeve is disposed between each coil and associated coil core.

14. (currently amended) Vibration generator as claimed in claim 2,
[characterized in that the slide fits in a] wherein said sliding promotion means
comprises brass [sleeve] sleeves.

15. (new) Vibration generator comprising an outer housing, coupling means for coupling said outer housing to an object to be investigated; a pair of opposing coil cores mounted within said outer housing; a pair of coils each movably mounted on an associated coil core; an inner housing arranged within said outer housing and fixedly secured to said coils; energizing means for alternatively energizing said coils to move each coil when energized in a direction opposition to the direction in which the other coil moves when said other coil is energized, whereby said inner housing is caused to reciprocate within said outer housing, and vibrations are imparted to the outer housing and in this way to the object to be investigated.